

Appl. No. 09/684,103  
Reply to 4/29/05 Office Action

Customer No. 41,230

### REMARKS

No claims have been added, cancelled, or amended pursuant to this paper. Thus, claims 7-29, 78-89, and 146-149 are pending in the present application.

#### Claim Rejections – 35 U.S.C. § 103

Claims 7-29, 78-89, and 146-149 have been rejected under 34 U.S.C. § 103(a) as being unpatentable over Japanese Patent Publication No. 61-14557 to Hatanaka et al. in view of U.K. Patent Application GB 2088832A to Fujii et al., and further in view of U.S. Patent No. 5,394,992 to Winkler and U.S. Patent No. 5,761,089 to McInerny.

An obviousness rejection under §103 requires that all the limitations of a claim must be taught or suggested by the prior art. M.P.E.P. § 2143.03 (citing *In re Royka*, 490 F.2d 981, 985, 180 U.S.P.Q. 580, 583 (C.C.P.A. 1974)). A *prima facie* case of obviousness, *inter alia*, requires:

(i) a “suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings,” and

(ii) that “the prior art reference[s] . . . must teach or suggest all the claim limitations.” See M.P.E.P. § 2143 (citing *In re Vaack*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991)).

Claims 7-29, 78-89, and 146-149 recite using a plurality of “closely spaced magnetic sensors” for processing currency. Hatanaka does not disclose, teach, or suggest using even one magnetic sensor to evaluate currency. Rather, Hatanaka discloses optically recognizing a pattern on a bill without even detailing how this optical pattern is recognized. See Hatanaka at p. 7, ¶ 2. Similarly, Winkler fails to disclose, teach, or suggest magnetically evaluating currency and does not even mention authenticating or denominating a currency bill. The Examiner attempts to overcome this clear deficiency in Hatanaka by stating that it would have been obvious to replace the optical readhead in Hatanaka (that reads an external print pattern) with a magnetic readhead that detects magnetic strips embedded in the bank notes as claimed by the Applicants. The Examiner supports this proposition by stating that detecting embedded strips embedded in bank notes “is common in the art,” but, the Examiner does not point to a single reference to support this assertion.

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The Examiner does, however, point to McNerny and states that the reference "teaches detecting such magnetic areas of a banknote." However, McNerny in no way discloses detecting a magnetic security thread within a bill. McNerny merely discloses utilizing a magnetic field detector to scan the magnetic ink bearing portions on the external surface of the currency. See McNerny at col. 8, lls. 44-45; col. 9, lls. 33-35, 57-58; col. 12, lls. 6-10. McNerny does not disclose, teach, or suggest detecting a magnetic attribute within the currency itself, such as a magnetic security thread. Further, McNerny does not disclose, teach, or suggest using a plurality of "closely spaced magnetic sensors" to evaluate currency.

Similarly, the detection of a security thread within a bill is in no way disclosed in Fujii. Fujii, in passing, states that an abnormal magnetic pattern can be detected. See Fujii at p. 1, line 112. However, Fujii in no way details how this may be performed. Fujii does not disclose, teach, or suggest utilizing "closely spaced magnetic sensors" as specifically claimed by applicant in every pending claim. Further, Fujii does not disclose, teach, or suggest the distinction between a normal/abnormal pattern or even what the pattern is. Additionally, Fujii does not disclose, teach, or suggest detecting a magnetic attribute within the currency itself, such as a magnetic security thread.

Neither Hatanaka, Fujii, Winkler, McNerny, nor a combination thereof disclose, teach, or suggest a currency evaluation device having a plurality of "closely spaced magnetic sensors." Thus, the Applicants respectfully submit that a *prima facie* case of obviousness has not been made and that claims 7-29, 78-89, and 146-149 are patentable over Hatanaka in view of Fujii, and further in view of Winkler and McNerny under 35 U.S.C. § 103(a) for at least this reason.

Further, none of the cited references disclose, teach, or suggest magnetically scanning to "detect the presence of a security thread within each of the bills" or "determine the location of the security thread within the bill" as specifically claimed in claims 7-29. As discussed above, McNerny only discloses utilizing a magnetic field detector to scan the magnetic ink bearing portions of the currency. See McNerny at col. 8, lls. 44-45; col. 9, lls. 33-35, 57-58; col. 12, lls. 6-10. McNerny discloses that once the ink bearing portions have been scanned, the evaluation is based on the distance from the end of one ink bearing portion of the pattern to the beginning of the next ink bearing portion. See McNerny at col. 9, lls 37-40. Thus, McNerny merely looks at the location of the two ink bearing portions on an external surface of a bill in relation to one another. McNerny does not disclose, teach, or suggest detecting a security thread within the

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currency itself. Additionally, because McInerny merely compares the relative locations of the two objects, McInerny does not determine the location of a single security thread within the bills. The technique disclosed by McInerny *necessarily requires* at least two magnetic features (disclosed as located on the external surface) to allow the location of one of the features to be determined. However, this location is relative only to the other magnetic feature and not to the bill itself.

Fujii, in passing, states that an abnormal magnetic pattern can be detected, but Fujii in no way details how this may be performed. See Fujii at p. 1, line 112. Significantly, Fujii makes no mention of a magnetic thread or the detection thereof. Likewise, neither Winkler nor Hatanaka mention magnetic sensors or the detection of magnetic threads.

Furthermore, claims 78-89, 146, and 147 require that "the plurality of magnetic sensors covering a substantial portion of a long dimension of the bill." Claims 148 and 149 require "at least two magnetic sensors being adapted to scan a substantially continuous segment of each of the currency bills, the substantially continuous segment being parallel to the narrow edge of the currency bills." Referring to FIG. 4 of McInerny, the single magnetic read-head 86 does not scan a substantial portion of a long dimension of the bill and does not scan a substantially continuous segment of each of the bills that is parallel to the narrow edge of the currency bills. Further, Fujii discloses, teaches, or suggests nothing regarding the positioning of any magnetic sensors. Likewise, neither Winkler nor Hatanaka mention magnetic sensors at all. Thus, the Applicants respectfully submit that a *prima facie* case of obviousness has not been made, and that claims 78-89 and 146-149 are patentable over Hatanaka in view of Fujii, and further in view of Winkler and McInerny under 35 U.S.C. § 103(a) for at least this additional reason.

The Office Action further includes a response section in reply to Applicants' prior arguments and amendments. The Office Action states that "[i]t would have been considered obvious to add a similar head, but that detects magnetic strips embedded in bank notes, as is common in the art, to the system of Hatanaka, since magnetic threads are used extensively in banknotes. . . ." The Office Action further responds that "[s]tandard magnetic strips . . . are magnetic in nature [and] would cause one ordinarily skilled to use a width-sized magnetic scanning head. Such a scanning head could be considered to be made up of a single head or several smaller heads, placed together widthwise." However, the Office Action noticeably fails to cite any support for either of these propositions.

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For example, though the Office Action definitively states that it would have been obvious to use a similar head to detect magnetic strips in bank notes, "as is common in the art," nowhere does the Examiner cite even a single reference where a magnetic thread is detected by a scanhead. In addition, though the Office Action speculates that a magnetic strip within a banknote would cause one of ordinary skill to use a width-sized magnetic scanhead and that the scanhead could include several smaller heads placed together, again the Office Action is devoid of any reference disclosing such a teaching. Even if such a reference could be cited, the Examiner would still have to demonstrate that the "several smaller heads" would be closely spaced as claimed in the present invention.

As instructed by M.P.E.P. § 2144.08III, "[t]he Office action should clearly communicate the Office's findings and conclusions, articulating how the conclusions are supported by the findings." Moreover, "[c]onclusory statements of similarity or motivation, without any articulated rational or evidentiary support, do not constitute sufficient factual findings." Thus, if the Examiner intends to dismiss Applicants' arguments and maintain the obvious rejection by referring to what "is common in the art," Applicants' respectfully request that sufficient factual finding be explicitly provided, referring specifically to citations within prior art disclosures, to clearly establish a *prima facie* case of obviousness with respect to each of the features recited by the claims.

#### Conclusion

In conclusion, the Applicants respectfully submit that all claims are in condition for allowance and such action is earnestly solicited.

If there are any matters which may be resolved or clarified through a telephone interview, the Examiner is respectfully requested to contact Applicants' undersigned attorney at the number indicated.

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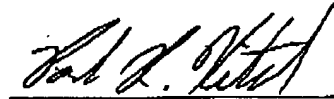
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The Commissioner is authorized to charge all fees as necessary which may be required relating to this document, (except for payment of the issue fee) or credit any overpayments to Jenkins & Gilchrist, P.C. Deposit Account No. 10-0447(47171-00271USP1).

Respectfully submitted,

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